

ABSTRACT OF THE DISCLOSURE

A power converter includes a current source providing an input current, a transformer having primary and secondary windings, a switch network coupling the current source and the primary winding, and a clamping circuit coupled to the switch network. An output bus is coupled to the secondary winding and provides an output voltage. A control circuit has inputs based on the output voltage and the input current, and generates switch network control signals based on those inputs. The control circuit also generates clamping circuit control signals based on the switch network control signals. The power converter may also include a start-up control circuit configured to selectively control the switch network and the clamping circuit so as to raise the output voltage to a desired level. In some embodiments, the switch network is a full bridge, and the clamping circuit includes first and second clamping switches.